

ABSTRACT OF THE INVENTION

The invention is a method for servicing subscriber ends by utilizing virtual LAN on ATU-R of ADSL, which utilizes VLAN to generate a plurality of virtual connections in an ADSL connection, couples equipment of each subscriber end to a plurality of subscriber input/output (I/O) ports in ATU-R, adds a switching hub in the ATU-R for identifying tagged data in the virtual connections, connects each subscriber end in the virtual connections with the switching hub via Ethernet, and assigns each subscriber I/O port in the switching hub to one of the virtual connections having a distinct tag. By utilizing this, each virtual circuit may service different subscriber ends, ensure no data packet of each subscriber end assigned to other subscriber line on the same ATU-R.